

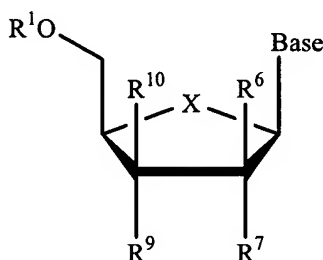
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-88 (canceled)

Claims 89 (previously presented): A method for the treatment of a hepatitis C virus infection in a host, comprising administering an anti-virally effective amount of a β -D nucleoside compound of formula:



or a pharmaceutically acceptable salt or ester thereof, wherein:

Base is a triazolopyridine, imidazolopyridine, or pyrazolopyrimidine;

R^1 is independently H; phosphate; stabilized phosphate prodrug; acyl; alkyl; sulfonate ester; benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid, phosphate, and phosphonate; a lipid; an amino acid; a carbohydrate; a peptide; cholesterol; or a pharmaceutically acceptable leaving group which when administered *in vivo* provides a compound wherein R^1 is independently H or phosphate;

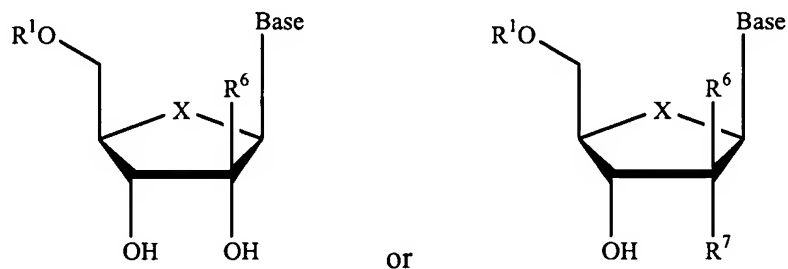
R^6 is alkyl, lower alkyl, alkynyl, $-C(O)O(alkyl)$, $-C(O)O(lower\ alkyl)$, $-O(acyl)$, $-O(lower\ acyl)$, $-O(alkyl)$, $-O(lower\ alkyl)$, $-O(alkenyl)$, chloro, bromo, fluoro, iodo, NO_2 , NH_2 , $-NH(lower\ alkyl)$, $-NH(acyl)$, $-N(lower\ alkyl)_2$, or $-N(acyl)_2$;

R^7 and R^9 are independently OR^1 , hydroxy, alkyl, lower alkyl, azido, cyano, alkenyl, alkynyl, Br-vinyl, $-C(O)O(alkyl)$, $-C(O)O(lower\ alkyl)$, $-O(acyl)$, $-O(lower\ acyl)$,

-O(alkyl), -O(lower alkyl), -O(alkenyl), chlorine, bromine, iodine, NO₂, NH₂,
-NH(lower alkyl), -NH(acyl), -N(lower alkyl)₂, or -N(acyl)₂;
R¹⁰ is H, alkyl, lower alkyl, chlorine, bromine or iodine; and
X is O, S, SO₂ or CH₂.

Claims 90-129 (canceled)

Claim 130 (previously presented): The method of claim 89 for the treatment of a hepatitis C virus infection in a host, comprising administering an anti-virally effective amount of a compound of formula:



or a pharmaceutically acceptable salt or ester thereof, wherein:

Base is a triazolopyridine, imidazolopyridine, or pyrazolopyrimidine;

R¹ is independently H; phosphate; a stabilized phosphate prodrug; acyl; alkyl; sulfonate ester; benzyl, wherein the phenyl group is optionally substituted with one or more substituents selected from the group consisting of hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, cyano, sulfonic acid, sulfate, phosphonic acid, phosphate, and phosphonate; a lipid; an amino acid; a carbohydrate; a peptide; a cholesterol; or a pharmaceutically acceptable leaving group which when administered *in vivo* provides a compound wherein R¹ is independently H or phosphate;

R⁶ is alkyl, lower alkyl, azido, cyano, alkenyl, alkynyl, Br-vinyl, -C(O)O(alkyl), -C(O)O(lower alkyl), -O(acyl), -O(lower acyl), -O(alkyl), -O(lower alkyl), -O(alkenyl), chloro, bromo, fluoro, iodo, NO₂, NH₂, -NH(lower alkyl), -NH(acyl), -N(lower alkyl)₂, or -N(acyl)₂;

R^7 is OR^1 , hydroxy, alkyl, lower alkyl, azido, cyano, alkenyl, alkynyl, Br-vinyl, -C(O)O(alkyl), -C(O)O(lower alkyl), -O(acyl), -O(lower acyl), -O(alkyl), -O(lower alkyl), -O(alkenyl), chlorine, bromine, iodine, NO_2 , NH_2 , -NH(lower alkyl), -NH(acyl), -N(lower alkyl)₂, or -N(acyl)₂; and
X is O, S, SO_2 or CH_2 .

Claim 131 (Currently Amended): The method of claim 89 for the treatment of a hepatitis C virus infection in a host, wherein, in the compound of Formula XVII:

R^{10} is H, alkyl, chlorine, bromine or iodine;

R^7 and R^9 are independently OR^2 OR^1 , alkyl, alkenyl, alkynyl, Br-vinyl, O-alkenyl, chlorine, bromine, iodine, NO_2 , NH_2 , -NH(lower alkyl), -NH(acyl), -N(lower alkyl)₂, or -N(acyl)₂;

R^6 is alkyl, lower alkyl, chlorine, bromine or iodine; and

X is O, S, SO_2 or CH_2 .

Claim 132 (previously presented): The method of claim 89 wherein R^1 is hydrogen or phosphate.

Claim 133 (previously presented): The method of claim 89 wherein R^1 is hydrogen, acyl or alkyl.

Claim 134 (previously presented): The method of claim 89 wherein R^6 is alkyl or lower alkyl.

Claim 135 (Currently Amended): The method of claim 89 wherein R^7 and R^9 are independently OR^2 OR^1 or hydroxy.

Claim 136 (previously presented): The method of claim 89 wherein R^7 is hydroxy.

Claim 137 (previously presented): The method of claim 89 wherein R^9 is hydroxy.

Claim 138 (previously presented): The method of claim 89 wherein R^7 and R^9 are hydroxy.

Claim 139 (previously presented): The method of claim 89 wherein R^{10} is hydrogen.

Claim 140 (previously presented): The method of claim 89 wherein X is O.

Claim 141 (previously presented): The method of claim 89 wherein

R¹ is hydrogen, alkyl, acyl, or phosphate;

R⁶ is alkyl or lower alkyl;

R⁷ and R⁹ are independently OR¹ or hydroxy;

R¹⁰ is hydrogen; and

X is O.

Claim 142 (previously presented): The method of claim 89, wherein the method comprises administering the compound or a pharmaceutically acceptable salt or ester thereof in combination or alternation with a second anti-hepatitis C virus agent.

Claim 143 (previously presented): The method of claim 142, wherein the second anti-hepatitis C virus agent is selected from the group consisting of consisting of interferon, ribavirin, a protease inhibitor, a thiazolidine derivative, a polymerase inhibitor, and a helicase inhibitor.

Claim 144 (previously presented): The method of claim 143, wherein the second anti-hepatitis C virus agent is interferon.

Claim 145 (previously presented): The method of claim 143, wherein the second anti-hepatitis C virus agent is a protease inhibitor.

Claim 146 (previously presented): The method of claim 143, wherein the second anti-hepatitis C virus agent is ribavirin.

Claim 147 (previously presented): The method of claim 89, wherein the compound is in the form of a dosage unit.

Claim 148 (previously presented): The method of claim 147, wherein the dosage unit contains 50 to 1000 mg of said compound.

Claim 149 (previously presented): The method of claim 147, wherein said dosage unit is a tablet or capsule.

Claim 150 (previously presented): The method of claim 89, wherein the host is a human.

Claim 151 (previously presented): The method of claim 89, wherein the compound nucleoside is in substantially pure form.

Claim 152 (previously presented): The method of claim 89, wherein compound is at least 90% by weight of the β -D-isomer.

Claim 153 (previously presented): The method of claim 89, wherein the compound is at least 95% by weight of the β -D-isomer.

Claim 154 (previously presented): The method of claim 89, wherein the compound is at least 85% by weight of the β -D-isomer.

Claim 155 (previously presented): The method of claim 89, wherein R^6 is methyl.

Claim 156 (previously presented): The method of claim 141, wherein R^6 is methyl.

Claim 157 (previously presented): The method of claim 89, wherein R^6 is methyl, and R^7 and R^9 are hydroxy.

Claim 158 (previously presented): The method of claim 89, wherein R^6 is methyl, R^7 and R^9 are hydroxy; and R^{10} is hydrogen.

Claim 159 (previously presented): The method of claim 89, wherein X is O; R^6 is methyl; R^7 and R^9 are hydroxy; and R^{10} is hydrogen.

Claim 160 (previously presented): The method of claim 159, wherein R^1 is H.

Claim 161 (previously presented): The method of claim 159, wherein R^1 is an acyl.

Claim 162 (previously presented): The method of claim 159, wherein R^1 is a phosphate.

Claim 163 (previously presented): The method of claim 159, wherein R^1 is an amino acid.

Claim 164 (previously presented): The method of claim 89, wherein the base is triazolopyridine.

Claim 165 (previously presented): The method of claim 89, wherein the base is imidazolopyridine.

- Claim 166 (previously presented): The method of claim 89, wherein the base is pyrazolopyrimidine.
- Claim 167 (previously presented): The method of any one of claims 159-163, wherein the base is triazolopyridine.
- Claim 168 (previously presented): The method of any one of claims 159-163, wherein the base is imidazolopyridine.
- Claim 169 (previously presented): The method of any one of claims 159-163, wherein the base is pyrazolopyrimidine.
- Claim 170 (previously presented): The method any one of claims 167-169, wherein the method comprises administering the compound or a pharmaceutically acceptable salt or ester thereof in combination or alternation with a second anti-hepatitis C virus agent.
- Claim 171 (previously presented): The method of claim 170, wherein the second anti-hepatitis C virus agent is selected from the group consisting of consisting of interferon, ribavirin, a protease inhibitor, a thiazolidine derivative, a polymerase inhibitor, and a helicase inhibitor.
- Claim 172 (previously presented): The method of claim 170, wherein the second anti-hepatitis C virus agent is interferon.
- Claim 173 (previously presented): The method of claim 170, wherein the second anti-hepatitis C virus agent is a protease inhibitor.
- Claim 174 (previously presented): The method of claim 170, wherein the second anti-hepatitis C virus agent is ribavirin.
- Claim 175 (previously presented): The method of any one of claims 167-174, wherein the host is a human.
- Claim 176 (previously presented): The method of any one of claims 167-174, wherein the host is a cell.

Claim 177 (previously presented): The method of claim 89, wherein the pharmaceutically acceptable carrier is suitable for oral delivery.

Claim 178 (previously presented): The method of claim 89, wherein the pharmaceutically acceptable carrier is suitable for intravenous delivery.

Claim 179 (previously presented): The method of claim 89, wherein the pharmaceutically acceptable carrier is suitable for parenteral delivery.

Claim 180 (previously presented): The method of claim 89, wherein the pharmaceutically acceptable carrier is suitable for intradermal delivery.

Claim 181 (previously presented): The method of claim 89, wherein the pharmaceutically acceptable carrier is suitable for subcutaneous delivery.

Claim 182 (previously presented): The method of claim 89, wherein the pharmaceutically acceptable carrier is suitable for topical delivery.

Claim 183 -196 (canceled):

Claim 184 (previously presented): The method of claim 89, wherein the host is a cell.